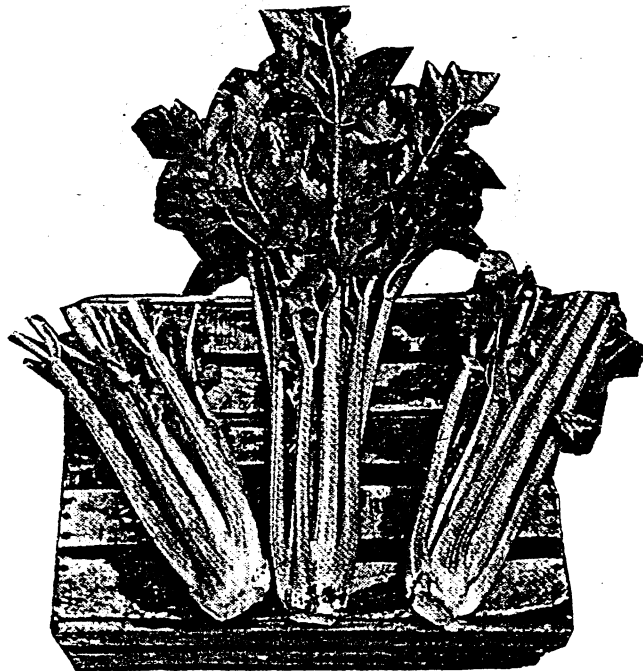


CELERY CULTIVAR EVALUATION TRIALS - 1996

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TABLE of CONTENTS

	Page
Celery Cultivar Evaluation Trials-1996	1
Acknowledgements	1
Table 1: Results Ferry-Morse and Peto Seeds	2
Table 1: Results VTR	3
Table 1: Results VTR (cont.) and Pybas	4
Table 1: Results Pybas (863) through Pybas (UC8)	5
Table 1: Results Pybas (Picador)	6
Table 1: Pybas (UC1 x California) through 72-HUD Leach	7
Table 2: Results Michigan Breeding Lines	8

Celery Cultivar Evaluation Trials - 1996

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The celery cultivar evaluation trials were conducted at the OARDC Muck Crops Branch near Willard, Ohio. Eighty cultivars or breeding lines were evaluated in a replicated trial, 73 in the early trial and 7 in a later trial.

Transplants were grown in a poly-greenhouse with temperatures set at 70° days and 60°F nights for 8 weeks. Plants were raised in Todd planter flats (0% OA) using Metro mix 360 as a growing media. Once the first true leaf appears, plants were fertilized on a continuous basis at the rate of 50 ppm of a Peters 20-10-20 solution using an Anderson injector system.

Growing conditions in 1996 were considered mild with a very dry August. Irrigation was applied as needed. Plants were never considered under stress. Fusarium pressure was considered high with the cultivar Florida 683 not holding up under the high pressure.

ACKNOWLEDGEMENTS

The 1996 Celery Cultivar Trial was sponsored jointly by the Ohio Vegetable and Small Fruit Research Check-Off Program and the Michigan Celery Research, Inc.

Table 1. Celery Cultivar Evaluation Trials, 1996

Cultivar	Visual ¹ Fusarium Rating	Cut ¹ Fusarium Rating	Total Wt./ plant (kg)	Trim Wt./ plant (kg)	% Trim loss (18 in)	Diameter stalk (mm)	Petiole length outside (in)	Comments
Ferry-Morse								
FM163-J*	1.00	1.00	3.18	2.18	31.38	106.00	10.50	Very tall, long thick petiole, smooth ribbed, nice.
FM163-K	0.94	0.94	1.98	1.28	26.64	86.56	10.63	Not much size, smooth ribbed petioles, very long.
Summer Time	1.00	1.00	2.25	1.63	27.48	96.33	10.00	Smooth ribbed, long petioles, lot of suckers.
Peto Seed								
Peto 285	2.75	3.00	2.54	1.57	38.38	88.50	7.50	Very short ribby celery, no weight or size, light green, suckers.
PSR 14892	2.33	3.00	2.42	1.63	32.76	80.50	9.50	Long, skinny peioles, no weight or size.
Comet	1.67	1.00	2.33	1.58	31.59	96.33	9.67	Smooth petioles, long and heavy petioles, lot of suckers, light green.
Ponderosa	3.67	3.67	1.09	0.71	34.95	76.00	8.00	Harvested, but no size or weight, questionable future.
MSU-SHK5	2.67	3.33	1.71	1.25	27.82	80.33	8.00	Very ribbey celery, long and skinny stalks, lot of suckers, no size or weight.
PSR 5114	3.5	3.50	1.20	0.95	21.21	81.00	9.00	Short, thick petioles. No size, no weight.
PSR 5117	3.00	3.25	2.61	1.83	21.42	87.25	7.50	Very short, smooth ribbed, no size, a lot of suckers, no weight, no heart.
PSR 5121	----	----	----	----	----	----	----	Not harvested.
Rocket	2.33	3.33	2.10	1.29	35.59	76.67	9.00	Very short, smooth ribbed, no size, stem cracking, brittle, lot of suckers.

Table 1. Celery cultivar evaluation trials, 1996.

Cultivar	Visual I Fusarium Rating	Cut I Fusarium Rating	Total Wt./ plant (kg)	Trim Wt./ plant (kg)	% Trim loss (18 in)	Diameter stalk (mm)	Petiole length outside (in)	Comments
VTR								
VTR 1744	1.33	2.00	2.36	1.57	32.10	97.67	9.33	Long, thick, heavy petioles, no heart, lot of suckers.
VTR Hyb 1914A*	1.00	2.33	2.65	1.65	37.93	103.33	11.00	Very long, skinny peioles, lot of suckers, ribbed celery, 2 nd rep not uniform, horizontal cracking.
VTR Hyb 1914B	1.00	3.00	2.49	1.48	40.16	95.33	9.67	Ribbed celery, horizontal stem cracking, not as good as the A form
VTR Hyb 1916A*	1.00	1.00	2.56	1.58	35.92	101.33	10.00	Nice size, horizontal cracking.
VTR Hyb 1916B	1.00	1.33	2.46	1.42	42.38	100.00	9.33	Lot of suckers, ribbed celery, horizontal stem cracking, not as good as the A form.
VTR 1917	1.00	2.33	2.28	1.43	37.28	91.00	8.67	Short, thin petioles, lot of suckers, no real size.
VTR 1967	1.17	1.33	2.42	1.79	25.06	90.00	10.00	Skinny petioles, smooth ribbed, good resistance, petiole size may be questionable.
VTR 1977-1	4.00							Not harvestable.
VTR 1977-2	4.00							Not harvestable.
VTR 1979-1*	1.00	1.17	2.97	1.98	33.44	120.67	11.33	Smooth, ribbed, nice celery, lot of external suckers, very meaty petioles, best in this group.
VTR 1979-2	1.67	1.83	2.17	1.50	30.16	94.67	8.33	Very short petioles, smooth, shot ribbed, lot of horizontal cracking, brittle, thick, and meaty.
VTR 1979-3	1.00	1.00	2.30	1.61	29.96	94.67	9.33	Lot of horizontal cracking, thick long petioles, smooth ribbed, lot of suckers, nice.

Table 1. Celery cultivar evaluation trials, 1996

Cultivar	Visual Fusarium Rating	Cut Fusarium Rating	Total Wt./ plant (kg)	Trim Wt./ plant (kg)	% Trim loss (18 in)	Diameter stalk (mm)	Petiole length outside (in)	Comments
VTR (cont.)								
VTR 1979-4*	1.33	1.33	2.17	1.46	32.05	98.67	8.67	Smooth ribbed, no size or weight, short skinny peioles, horizontal cracking, nice.
VTR 1979-5	5.00							Not harvestable.
VTR 1979-6	3.00	3.00	2.34	1.66	28.89	85.00	9.00	Fair size, lot of suckers, smooth, ribbed, thick petioles, questionable level or resistance.
VTR 1901*	2.33	2.50	2.32	1.59	31.29	104.33	8.00	Ribbed celery, med length, thick meaty, very heavy, nice size heart.
PYBAS (Picador x California)								
961001	1.00	1.00	2.20	1.44	34.19	91.67	11.33	Long, skinny petioles, no size.
961002	1.00	1.00	2.38	1.48	37.78	83.33	11.00	Long, meaty petioles, medium size, lot of suckers.
961003	1.00	1.00	1.83	1.23	31.92	87.67	9.33	No size, lot of suckers, ribbed celery, poor third rep.
961004*	1.00	1.00	2.69	1.73	35.41	93.67	11.33	Long petioles, good size, ribbed, lot of suckers.
961005	1.00	1.00	2.08	1.37	33.27	87.67	9.67	Smooth ribbed, horizontal cracking, good size in hearts, medium length petioles, lot of suckers.
961006*	1.00	1.00	2.26	1.51	33.46	100.67	8.33	Thick meaty in the heart, really nice, great future, lot of suckers, very short.
961007*	1.00	1.17	2.06	1.44	29.27	100.00	12.00	Real long & meaty, ribbed celery, good size, plants are yellow

Table 1. Celery cultivar evaluation trials, 1996.

Cultivar	Visual Fusarium Rating	Cut Fusarium Rating	Total Wt./ plant (kg)	Trim Wt./ plant (kg)	% Trim loss (18 in)	Diameter stalk (mm)	Petiole length outside (in)	Comments
PYBAS (863 Selection)								
961008*	1.17	1.33	2.47	1.71	30.37	100.67	10.33	Very brittle, long petioles, ribbed, very big.
961009	1.50	1.83	2.40	1.70	29.32	101.33	10.33	Long, very meaty, good size, smooth ribbed.
961012*	1.00	1.33	2.92	1.67	42.92	98.67	11.33	Skinny, long ribbed, excellent heart size, nice, light green, heavy suckers, rep 3 spotty fusarium.
961013	1.00	1.00	2.52	2.03	20.34	106.67	12.00	Thick, meaty, ribbed not uniform, long petioles, grows open.
961014*	1.00	1.00	2.17	9.62	28.91	97.33	11.17	Ribbed, grows open, long, not many suckers.
961015	1.00	1.33	2.30	1.64	28.77	102.67	10.67	Grows open, wide petioles, little trim, meaty.
XP166	1.00	1.00	1.98	1.35	31.85	85.00	10.00	
XP 266*	1.00	1.00	2.15	1.42	33.98	108.00	8.50	
XP 85	2.00	2.00	2.02	1.23	39.02	107.00	14.00	
PYBAS (UC 10 Selection)								
961016	3.17	4.00	2.07	1.07	48.29	104.00	10.00	
PYBAS (UC 8 Selection)								
961017	1.00	1.00	1.52	0.93	38.95	86.00	12.00	Smooth, ribbed, long petioles, lacking in size.
961018	1.17	2.00	2.27	1.41	36.78	90.67	11.00	Ribbed, long petioles, small size suckers.

Table 1. Celery cultivar evaluation trials, 1996

Cultivar	Visual ^I Fusarium Rating	Cut ^I Fusarium Rating	Total Wt./ plant (kg)	Trim Wt./ plant (kg)	% Trim loss (18 in)	Diameter stalk (mm)	Petiole length outside (in)	Comments
PYBAS (Picador)								
961019	1.17	1.50	2.21	1.57	28.73	99.67	10.67	Ribbed, medium length, no size.
961020	1.00	1.00	2.08	1.51	27.48	96.33	11.17	Ribbed, tall thick, meaty, good size.
961021	1.00	1.00	2.18	1.51	30.51	91.33	12.67	Long petioles, ribbed, good size, horizontal cracking.
961022	2.50	2.50	2.39	0.94	26.73	103.50	9.00	Short petioles, good meaty.
961023	1.00	1.17	2.25	1.58	29.12	88.67	9.67	Ribbed, medium petioles, medium thickness, not uniform.
961024	1.00	1.00	1.72	1.26	25.62	89.00	9.00	Very spongy, soft signs of puffiness, 2 nd , 3 rd rep poor.
961025*	---	---	1.63	1.05	---	---	---	Ribbed, small petioles, small suckers.
961026	2.67	2.50	1.89	1.31	30.39	68.00	8.67	Smooth to ribbed, medium length, thick, meaty.
961027	2.33	2.67	2.35	1.54	32.94	98.67	9.33	Long petioles, medium, meaty, good size, lot of suckers, not uniform.
961028	1.17	1.50	2.59	1.77	31.67	115.33	10.00	Size is variable.
961029*	1.00	1.00	2.57	1.37	45.79	105.00	10.67	Smooth, ribbed, good size, long petioles, lot of suckers.
961030	1.00	1.00	2.54	1.50	40.71	90.33	12.33	Tall petioles, very ribbed, good size.
961031	---	---	1.91	1.11	---	---	---	Lot of suckers, long petioles, not uniform.
961032*	1.00	1.00	2.40	1.61	32.21	97.00	9.33	Short petioles, thick, meaty, ribbed, good size, some bolting.
89-D-M-92-1-3	1.00	1.00	1.97	1.26	35.83	107.00	11.00	
961033	3.83	5.00	---	---	---	---	---	

Table 1. Celery cultivar evaluation trials, 1996

Cultivar	Visual ¹ Fusarium Rating	Cut ¹ Fusarium Rating	Total Wt./ plant (kg)	Trim Wt./ plant (kg)	% Trim loss (18 in)	Diameter stalk (mm)	Petiole length outside (in)	Comments
PYBAS (UC1 x California)								
961034*	1.00	1.00	2.42	1.52	37.33	92.00	9.33	Short petioles, heavy centers, excellent celery, lot of suckers.
961035	4.67	---	---	---	---	---	---	
961036	---	---	1.87	0.95	---	---	---	Long petioles, really tall, lot of suckers, smooth ribbed, good size.
961037*	1.00	1.83	2.36	1.56	32.87	99.33	8.67	Lot of suckers, short, thick, meaty, ribbed.
961038*	1.00	1.50	2.28	1.35	39.98	89.33	10.00	Lot of suckers, thick, meaty, ribbed, medium length.
PYBAS (52-70R Selection)								
961039	1.00	1.00	2.32	1.32	42.36	101.33	9.33	Lot of suckers, real pithy, long petioles, ribbed, good size.
961040	1.50	1.67	2.26	1.34	40.29	92.33	8.00	Not uniform, very short, ribbed, no good size.
951041	1.00	1.00	1.95	1.21	38.17	91.00	9.33	Short stalk, skinny petioles, no size or weight, lot of suckers.
72-HUD Leach	1.00	1.00	1.93	1.18	39.04	95.00	11.00	

Seeded: March 5, 1996

*Considered best in the group

Transplanted: May 15-16, 1996

¹)Fusarium Rating: 1 = none to 5 = dead

Harvested: August 22, 1996

Sample Size: 10 stalks per row; 2 rows per rep; 4 reps per cultivar

Spacing: 20 foot row length (40 plants); 30 inches between row; 6 inches between plants.

Table 2. Celery cultivar evaluation trials, 1996.

Cultivar	Visual Fusarium Rating	Cut Fusarium Rating	Total Wt./ plant (kg)	Trim Wt./ plant (kg)	% Trim loss (18 in)	Diameter stalk (mm)	Petiole length outside (in)	Comments
MICHIGAN BREEDING LINES								
Florida 683	5.00	---	---	---	---	---	---	
FL 1-4-1-2	2.50	3.00	2.99	1.88	36.78	90.64	7.00	Short petioles, lots of leaves, grows open, smooth ribbed.
FL 1-4-1-7*	2.75	2.75	3.32	2.17	34.52	70.75	6.00	Nice, Fusarium, smooth ribbed.
FL 1-4-3-1	2.88	3.00	3.72	2.27	39.34	96.00	7.25	Smooth ribbed.
FL 1-4-5-1	3.38	3.25	2.76	1.80	34.36	85.75	7.00	Fusarium real bad.
FL 1-4-5-3	2.50	3.50	3.73	2.28	38.58	89.98	1.75	Junk
FL 1-6-1-4	3.50	4.00	2.67	1.82	27.60	95.08	8.57	Junk

Seeded: May 9, 1996

Transplanted: July 1, 1996

Harvested: October 11, 1996

Sample: 10 stalks per row; 2 rows per rep; 4 reps per cultivar

Spacing: 30 inches between rows; 6 inches between plants; 20-foot row length (40 plants)

*Considered best in the group.

¹)Fusarium Rating: 1 = none to five = dead

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